

Chapter 5

FACTS AND FIGURES

A Note on Sources of Data and Estimates

The NSF award data provided in this chapter and in the Appendix comes from the NSF Main Database. Data for FY1997 was collected on June 17, 1998; data for FY1998, on June 23, 1999; data for FY1999, on June 16, 2000; and data for FY1994 and FY1995, on August 12 and 13, 2000.

The following categories are used to define NSF awards supporting two-year colleges:

- *Awards managed by the Advanced Technological Education (ATE) program.* The amount awarded by the ATE program and any other programs for a given fiscal year is counted as support for two-year colleges during that fiscal year.
- *Non-ATE awards for which the performing organization is a two-year college.* The total amount awarded for a given fiscal year is counted as support for two-year colleges during that fiscal year.
- *Awards which do not fall into one of the categories above, but for which the Principal Investigator (PI) is affiliated with a two-year college.* The total amount awarded for a given fiscal year is counted as support for two-year colleges during that fiscal year.
- *Awards which do not fall into one of the categories above but which received co-funding from the ATE program.* Only the ATE program's contribution to the award for a given fiscal year is counted as support for two-year colleges during that fiscal year.

The categories above exclude a number of awards that benefit two-year colleges to some extent—for example, those in which a co-PI is affiliated with a two-year college and those in which two-year colleges participate (and in many cases have subawards) as part of a consortium led by a university or other organization. These other categories of awards are excluded because NSF's databases do not offer a practical means of reliably identifying the awards or reliably estimating two-year colleges' involvement in them. Among the large awards that are, in general, excluded from this book's estimates of NSF support for two-year colleges are the Louis Stokes Alliances for Minority Participation (LSAMP), the Statewide Systemic Initiatives (SSI), the Urban Systemic Initiatives (USI), and the NSF Collaboratives for Excellence in Teacher Preparation (CETP). Although it is difficult to precisely determine the support that two-year colleges have received through these programs, the benefits are surely substantial. A conservative estimate is that 10% of the award budgets in these programs have directly benefited two-year colleges.

While extensive efforts have been made to identify and correct errors in the award data included here, some information may still be missing or incorrect. For example, in a few cases, two-year colleges are not coded as such in the NSF Main Database and thus do not show up when two-year college data is collected; and in a few other cases, institutions that were once two-year colleges but have changed their status are still coded as two-year colleges in the database and thus show up, erroneously, when two-year college data is collected. In addition, some PIs who were once affiliated with a two-year college but have moved to another type of institution are still coded as affiliated with the two-year college in the database, and thus show up, erroneously, when two-year college data is collected. A number of errors of these types have been caught and corrected, but others no doubt remain.

ATE awards, which account for much of NSF's support for two-year colleges, are financially managed, in all but a few cases, by the Division of Undergraduate Education (DUE). For this reason, DUE receives credit for these awards in this book's tabulation of awards by directorate and division. However, through

FY1999, the ATE program's budget was divided between DUE and the Division of Elementary, Secondary, and Informal Education (ESIE); DUE typically contributed 75% of an award's budget, and ESIE typically contributed 25%. (Most ATE awards involve activities at both the college and secondary school levels, and the program has been coordinated jointly by DUE and ESIE since its inception.) Therefore, ESIE's actual support for two-year colleges is underestimated in this book, and DUE's is overestimated.

Acronyms of NSF Directorates, Divisions, Offices, and Programs Cited in This Chapter and the Appendix

- BIO** Directorate for Biological Sciences
- DBI** Division of Biological Infrastructure
 - IID** Instrumentation and Instrument Development
 - REU** Research Experiences for Undergraduates Sites
 - MCB** Division of Molecular and Cellular Biosciences
 - MG** Microbial Genetics
- CISE** Directorate for Computer and Information Science and Engineering
- ANIR** Division of Networking Infrastructure and Research
 - NI** Network Infrastructure
 - EIA** Division of Experimental and Integrative Activities
 - RI** Research Infrastructure
 - IIS** Division of Information and Intelligent Systems
 - IDM** Information and Data Management
- EHR** Directorate for Education and Human Resources
- DGE** Division of Graduate Education
 - PFSMETE** NSF Postdoctoral Fellowships in Science, Mathematics, Engineering, and Technology Education
 - DUE** Division of Undergraduate Education
 - ATE** Advanced Technological Education
 - CCD** Course and Curriculum Development
 - CCLI-AA** Course, Curriculum, and Laboratory Improvement—Chemistry “Adapt and Adopt”
 - CCLI-A&I** Course, Curriculum, and Laboratory Improvement—Adaptation and Implementation
 - CCLI-EMD** Course, Curriculum, and Laboratory Improvement—Educational Materials Development
 - CETP** NSF Collaboratives for Excellence in Teacher Preparation
 - ILI** Instrumentation and Laboratory Improvement
 - UFE** Undergraduate Faculty Enhancement
 - ESIE** Division of Elementary, Secondary, and Informal Education
 - ATE** Advanced Technological Education
 - IMD** Instructional Materials Development
 - TE** Teacher Enhancement
 - YS** Young Scholars
 - ESR** Division of Educational System Reform
 - RSI** Rural Systemic Initiative

- HRD** Division of Human Resource Development
 - AWGSEM** Activities for Women and Girls in Science, Engineering, and Mathematics
 - LSAMP** Louis Stokes Alliances for Minority Participation
 - MIE** Model Institutes of Excellence
 - PAESMEM** Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring
- REC** Division of Research, Evaluation, and Communication
 - NIE** Networking Infrastructure for Education
 - PE** Program Evaluation
 - RA** Research Activities

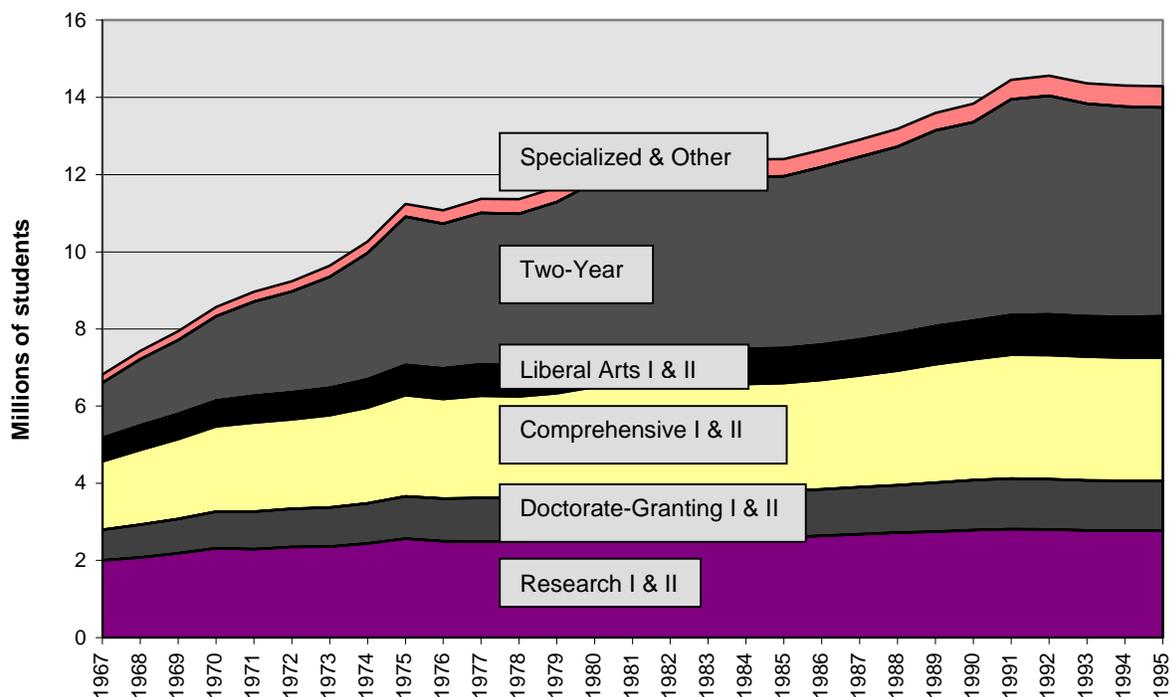
- ENG** Directorate for Engineering
 - ECS** Division of Electrical and Communications Systems
 - IS** Integrative Systems
 - EEC** Division of Engineering Education and Centers
 - EE** Engineering Education

- GEO** Directorate for Geosciences
 - ATM** Division of Atmospheric Sciences
 - AC** Atmospheric Chemistry
 - EAR** Division of Earth Sciences
 - E&HR** Education and Human Resources
 - GC** Global Change

- MPS** Directorate for Mathematical and Physical Sciences
 - AST** Division of Astronomical Sciences
 - SPA** Special Programs in Astronomy
 - CHE** Division of Chemistry
 - BP** Bimolecular Processes
 - DMR** Division of Materials Research
 - Metals** Metals
 - MT** Materials Theory

- OD** Office of the Director
 - OIA** Office of Integrative Activities
 - ARF** Academic Research Facilities
 - OPP** Office of Polar Programs
 - AOCS** Antarctic Oceans and Climate Systems

Figure 1
**ENROLLMENT IN U.S. HIGHER EDUCATION
 BY INSTITUTION TYPE**
 1967 – 1995



This figure is adapted from *Science and Engineering Indicators 2000* (NSB 00-1), vol. 1, Figure 4-3.

Table 2
NATIONAL SCIENCE FOUNDATION (NSF)
SUPPORT FOR TWO-YEAR COLLEGES
FY1995 – FY1999

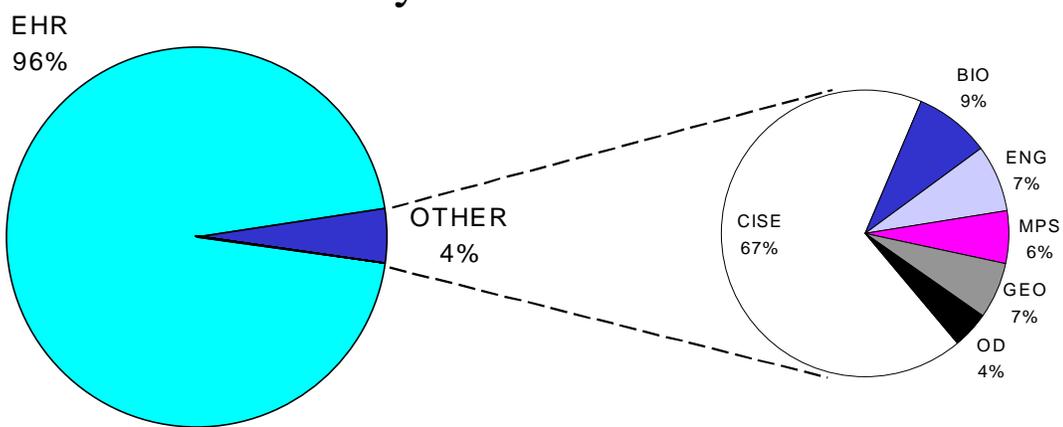
Directorate/Office	FY1995		FY1996		FY1997		FY1998		FY1999	
	No. of Awards	Dollars (1000s)								
Office of the Director (OD)	0	0	0	0	1	119	1	55	1	33
Biological Sciences	3	150	5	376	2	303	2	74	1	69
Computer & Information Sciences & Engineering	4	817	16	1,345	21	2,933	5	481	1	50
Engineering	0	0	1	52	2	296	1	81	0	0
Geosciences	2	261	1	157	1	154	1	107	3	73
Mathematical & Physical Sciences	0	0	2	109	2	122	2	96	1	89
Social, Behavioral & Economic Sciences	0	0	0	0	0	0	0	0	0	0
<i>TOTAL, OD and Research Directorates</i>	9	1,228	25	2,039	29	3,927	12	894	7	314
Education & Human Resources (EHR)	90	24,144	168	33,540	172	36,603	160	38,363	115	34,824
<i>TOTAL, NSF</i>	99	25,372	193	35,579	201	40,530	172	39,257	122	35,138

Table 3
NSF DIRECTORATE FOR EDUCATION AND HUMAN RESOURCES (EHR)
SUPPORT FOR TWO-YEAR COLLEGES
FY1995 – FY1999

Division	FY1995		FY1996		FY1997		FY1998		FY1999	
	No. of Awards	Dollars (1000s)								
Educational System Reform	0	0	1	567	1	2,400	1	2,119	1	2,000
Elementary, Secondary & Informal Education	8	2,909	12	3,609	7	1,646	8	690	4	493
EPSCoR	0	0	0	0	0	0	0	0	0	0
Graduate Education	0	0	0	0	0	0	0	0	1	51
Human Resource Development	1	128	6	3,881	6	2,100	6	2,931	3	3,236
Research, Evaluation & Communication	0	0	2	555	2	554	1	218	1	220
Undergraduate Education	81	21,107	147	24,928	156	29,903	144	32,405	105	28,824
TOTAL	90	24,144	168	33,540	172	36,603	160	38,363	115	34,824

Figure 2
NSF Support for Two-Year Colleges
 FY1997 – FY1999

By NSF Directorate



By EHR Division

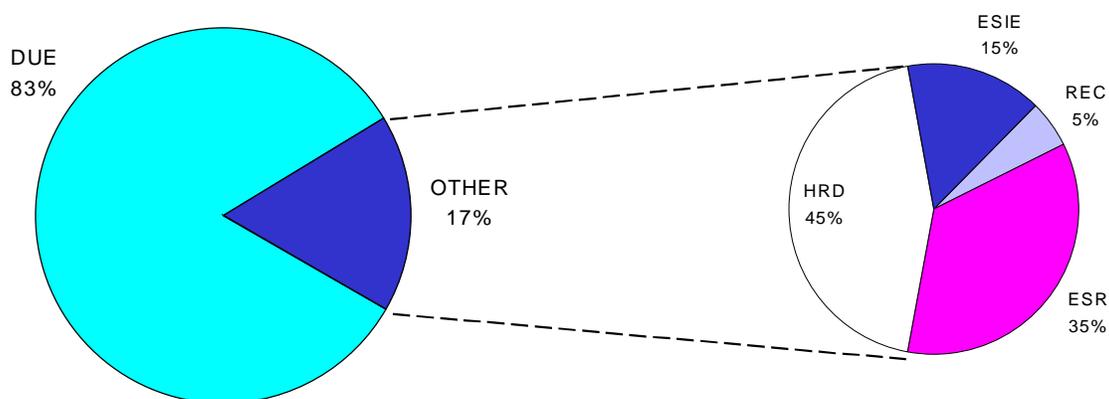


Figure 3
NSF Support for Two-Year Colleges
FY1995 – FY1999

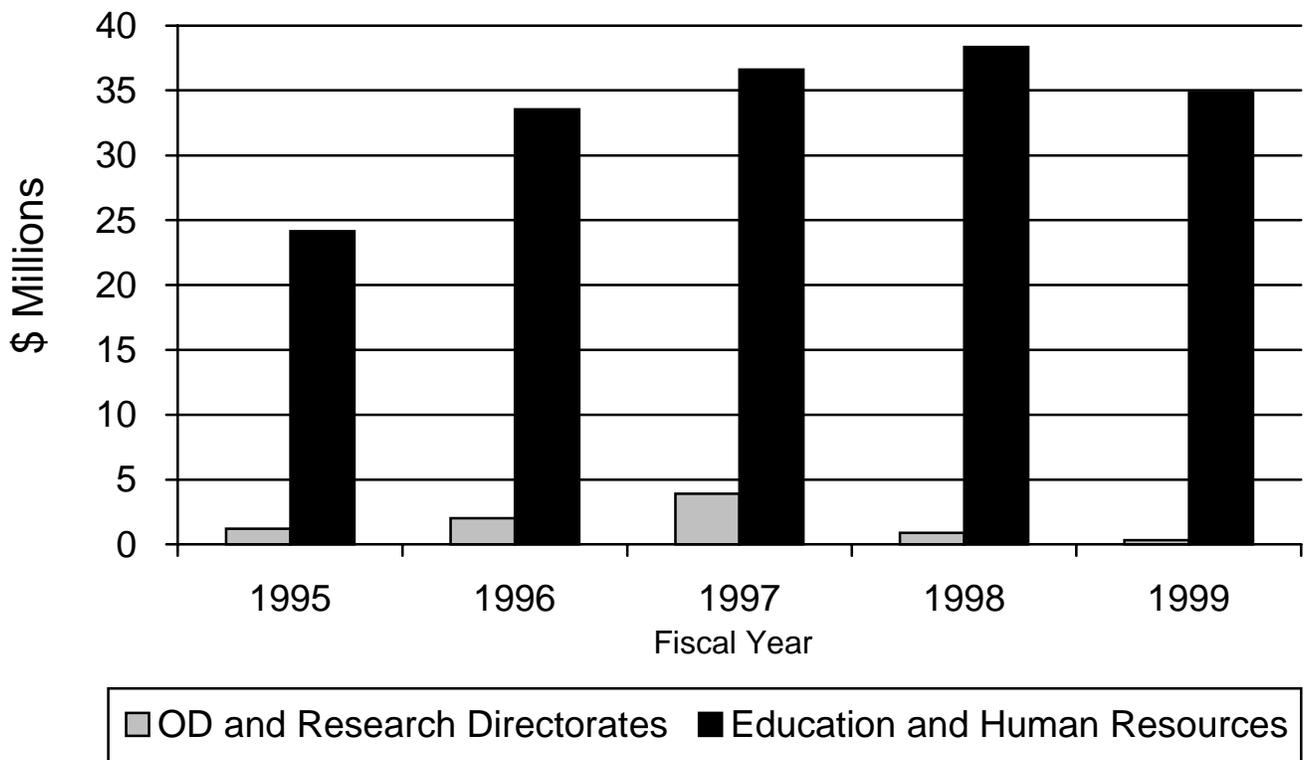


Figure 4
**Distribution by State of NSF Awards Supporting
 Two-Year Colleges**
 FY1997 – FY1999

Total number of awards: 400

